

CLAIMS

1. A method of protecting an area of a green tire from a substance being sprayed on an inner surface of the tire including the steps of:

spraying the substance onto an interior surface of a green tire; and

5 directing streams of high pressure air against the inner surface of the green tire on both sides of the area to be protected during the step of spraying the substance onto the interior surface to create an air barrier to reduce the amount of sprayed substance contacting the protected area.

10 2. The method defined in claim 1 wherein the protected area is a splice formed in an innerliner attached to the interior surface of the green tire, and the sprayed substance is a bladder release lubricant.

3. The method defined in claim 2 including the step of sensing the amount of pressure
15 of the high pressure air.

4. The method defined in claim 3 including the step of stopping the spraying of the bladder release lubricant upon the pressure of the high pressure air dropping below or rising above a predetermined amount.

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5. The method defined in claim 2 including the steps of inserting an air nozzle into a central opening of the tire; and moving said air nozzle radially within the tire opening

toward the innerliner splice for directing the high pressure air stream towards the sides of the splice.

6. The method defined in claim 5 including the step of stopping the radial movement of the air nozzle whereby said nozzle is located adjacent a bead area of the green tire.

7. The method defined in claim 5 including the step of providing the air nozzle with a pair of elongated spray orifices which extend generally between spaced beads of the tire.

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8. The method defined in claim 2 including the steps of inserting a pair of lubricant spray nozzles, generally axially into a central opening of the tire; and rotating said spray nozzle for spraying the lubricant onto the innerliner of the tire.

15 9. The method defined in claim 8 including the step of suspending the air nozzle in a fixed non-rotatable position below the lubricant spray nozzles.

10. Apparatus for protecting an innerliner splice of a green tire comprising:

20 a spray station having at least one lubricant spray nozzle connected to a supply of release lubricant for applying said lubricant on the innerliner of the green tire; and

at least one air nozzle connected to a supply of high pressure air for directing a pair of air streams on opposite sides of the innerliner splice creating a protective air barrier about said splice protecting said splice from contact by the lubricant.

11. The apparatus defined in claim 10 wherein the air nozzle includes a pair of elongated orifices for creating the pair of air streams.

5 12. The apparatus defined in claim 11 wherein the elongated orifices are configured whereby the pair of air streams extend in an outwardly angled direction from said nozzle.

13. The apparatus defined in claim 10 including a regulator for controlling the pressure
10 of the high pressure air entering the nozzle and a pressure sensor for detecting a reduction or increase of the air pressure at the nozzle.

14. The apparatus defined in claim 10 including a compressor and a pressure regulator upstream of the air nozzle and a pressure sensor located downstream of the air nozzle.

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15. The apparatus defined in claim 10 including a shaft movable axially and radially with respect to a central opening of the green tire; and a pair of bearings mounted on the shaft for supporting the air nozzle on the shaft.

20 16. The apparatus defined in claim 15 wherein the shaft is rotatable and the lubricant spray nozzle is mounted on the shaft; and in which the air nozzle is free of rotation from the shaft by the bearings.